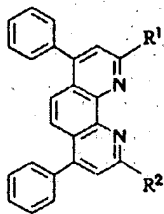


In the Claims

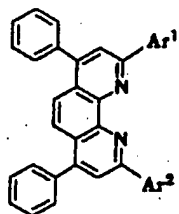
11. (Currently Amended) A bathophenanthroline compound of formula (I):



El wherein R¹ and R² are derived from R¹-Li and R²-Li respectively, and may be the same or different and independently represent a hydrocarbon group provided that at least one of R¹ and R² has at least two carbons; and wherein R¹ and R² are selected from the group consisting of an ethyl group, an n-propyl group, an isopropyl group, an n-pentyl group, an iso-pentyl group, a neopentyl group, a tert-pentyl group, a cyclopentyl group, a ~~methycyclopentyl~~ methylcyclopentyl group, a ~~dimethycyclopentyl~~ dimethylcyclopentyl group, a ~~trimethycyclopentyl~~ trimethylcyclopentyl group, a ~~tetramethycyclopentyl~~ tetramethylcyclopentyl group, an n-hexyl group, a 2-ethylbutyl group, a 3,3-dimethylbutyl group, a cyclohexyl group, an n-cyclohexylmethyl group, an ~~n,n-dimethycyclohexyl~~ n,n-dimethylcyclohexyl group, an ~~n,n,n-trimethycyclohexyl~~ n,n,n-trimethylcyclohexyl group, a tert-octyl group, a 2-ethylhexyl group, an n-nonyl group, an n-decyl group, an n-dodecyl group, an n-tetradecyl group, an n-hexadecyl group, a benzyl group, a phenethyl group, an α -methylbenzyl group, an α,α -dimethylbenzyl group, a 1-naphthylmethyl group, a 2-naphthylmethyl group, a furfuryl group, a 2-methylbenzyl group, a 3-methylbenzyl group, a 4-methylbenzyl group, a 4-ethylbenzyl group, a 4-isopropylbenzyl ~~4-isopropylbenzyl~~ group, a 4-tert-butylbenzyl group, a 4-n-hexylbenzyl group, a 4-nonylbenzyl group, and a 3,4-dimethylbenzyl group.

12. (previously canceled)

13. (Currently Amended) A bathophenanthroline compound ~~adapted to be used~~ for use as an organic layer having a luminescent region provided between an anode and a cathode, wherein the organic layer comprises a bathophenanthroline compound of formula :



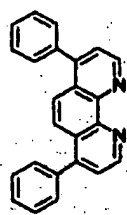
wherein Ar¹ and Ar² may be the same or different and independently represent an aryl group but do not form an interlocking macrocyclic compound.

14. (Currently Amended) The bathophenanthroline compound according to claim 13 wherein Ar¹ and Ar² are selected from the group consisting of a 1-naphthyl group, a 2-anthryl group, a 9-anthryl group, a 2-fluorenyl group, a 4-quinolyl group, a pyridyl group, a 3-pyridynyl group, a 2-pyridynyl group, a 3-furyl group, a 2-furyl group, a 3-thienyl group, a 2-oxazolyl group, a 2-thiazolyl group, a 2-benzoxazolyl group, a 2-benzothiazolyl group, a 2-benzoimidazolyl group, a 4-methylphenyl group, a 3-methylphenyl group, a 2-methylphenyl group, a n,n-dimethylphenyl group, a n,n,n-trimethylphenyl group, a n-ethylphenyl group, a n,n-diethylphenyl group, a n,n,n-triethylphenyl group, a 4-n-propylphenyl group, a n-isopropylphenyl group, a 4-n-butylphenyl group, a 4-isobutylphenyl group, a 4-sec-butylphenyl group, a n-tert-butylphenyl group.

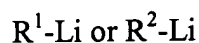
15. (previously canceled)

16. (Previously Added) A process, comprising:

(a) obtaining a bathophenanthroline of formula



(b) subjecting the bathophenanthroline to nucleophilic substitution reaction at the 2, 9 positions by a lithium compound of formula (III):

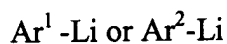


wherein R^1 and R^2 may be the same or different and independently represent a hydrocarbon group provided that at least one of R^1 and R^2 has at least two carbon atoms, and R^1 reacts at the 2 position and R^2 reacts at the 9 position of the bathophenanthroline.

17. (Previously Added) The process according to Claim 16, wherein a carbanion is generated from the lithium compound in a solution and reacted with the bathophenanthroline during the nucleophilic substitution reaction.

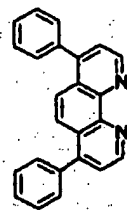
18. (Previously Added) A process, comprising:

(a) obtaining a lithium compound of formula (V):



wherein Ar^1 and Ar^2 may be the same or different and independently represent an aryl group,

(b) subjecting the lithium compound to a bathophenanthroline of formula (IV):



via nucleophilic substitution reaction at the 2, 9 positions of the bathophenanthroline where A^1 reacts at the 2 position and A^2 reacts at the 9 position of the bathophenanthroline.

19. (Previously Added) The process according to Claim 18, wherein a carbanion is generated from the lithium compound in a solution and reacted with the bathophenanthroline during the nucleophilic substitution reaction.